

#3

SEQUENCE LISTING

<110> Davis, Heather L.
Schorr, Joachim
Krieg, Arthur M.

<120> Use of Nucleic Acids Containing
Unmethylated CpG Dinucleotide as an Adjuvant

<130> C1039/7058/HCL

<140>

<141> 2001-12-18

<150> US 09/325,193

<151> 1999-06-03

<150> US 09/154,614

<151> 1998-09-16

<150> PCT/US98/04703

<151> 1998-03-10

<150> US 60/040,376

<151> 1997-03-10

<160> 98

<170> FastSEQ for Windows Version 3.0

<210> 1

<211> 15

<212> DNA

<213> Artificial Sequence

<400> 1

gctagacgtt agcgt

15

<210> 2

<211> 15

<212> DNA

<213> Artificial Sequence

<400> 2

gctagatgtt agcgt

15

<210> 3

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<221> modified_base

<222> (7)...(7)

<223> m5c

<400> 3

gctagacgtt agcgt

15

<210> 4

<211> 15

<212> DNA

<213> Artificial Sequence

10023909.12101

<220>
<221> modified_base
<222> (13)...(13)
<223> m5c

<400> 4
gctagacgtt agcgt 15

<210> 5
<211> 15
<212> DNA
<213> Artificial Sequence

<400> 5
gcatgacgtt gagct 15

<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 6
atggaaggctc cagcgttctc 20

<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 7
atcgactctc gagcgttctc 20

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> modified_base
<222> (3)...(3)
<223> m5c

<400> 8
atcgactctc gagcgttctc 20

<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<221> modified_base
<222> (18)...(18)
<223> m5c

<400> 9
atcgactctc gagcgttctc 20

<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 10
atggaaggctc caacgttctc 20

10023909-121301

<210> 11	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 11	
gagaacgctg gaccttccat	20
<210> 12	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 12	
gagaacgctc gaccttccat	20
<210> 13	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 13	
gagaacgctc gaccttcgat	20
<210> 14	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<221> modified_base	
<222> (14)...(14)	
<223> m5c	
<400> 14	
gagaacgctg gaccttccat	20
<210> 15	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 15	
gagaacgatg gaccttccat	20
<210> 16	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 16	
gagaacgctc cagcactgat	20
<210> 17	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 17	
tccatgtcgg tcctgatgct	20
<210> 18	
<211> 20	
<212> DNA	
<213> Artificial Sequence	

10023909-121301

```

<220>
<221> modified_base
<222> (12)...(12)
<223> m5c

<400> 18
tccatgtcgg tcctgatgct 20

<210> 19
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 19
tccatgacgt tcctgatgct 20

<210> 20
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 20
tccatgtcgg tcctgctgat 20

<210> 21
<211> 8
<212> DNA
<213> Artificial Sequence

<400> 21
tcaacggt 8

<210> 22
<211> 8
<212> DNA
<213> Artificial Sequence

<400> 22
tcagcgct 8

<210> 23
<211> 8
<212> DNA
<213> Artificial Sequence

<400> 23
tcatcgat 8

<210> 24
<211> 8
<212> DNA
<213> Artificial Sequence

<400> 24
tcttcgaa 8

<210> 25
<211> 7
<212> DNA
<213> Artificial Sequence

<400> 25
caacggt 7

<210> 26

```

10023909-121801

<211> 8	
<212> DNA	
<213> Artificial Sequence	
<400> 26	
ccaacggt	8
<210> 27	
<211> 8	
<212> DNA	
<213> Artificial Sequence	
<400> 27	
aacgttct	8
<210> 28	
<211> 8	
<212> DNA	
<213> Artificial Sequence	
<400> 28	
tcaacgtc	8
<210> 29	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 29	
atggactctc cagcgttctc	20
<210> 30	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 30	
atggaaggctc caacgttctc	20
<210> 31	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 31	
atcgactctc gagcgttctc	20
<210> 32	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 32	
atggaggctc catcgttctc	20
<210> 33	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<221> modified_base	
<222> (14)...(14)	
<223> m5c	

10023909-2807

<400> 33	
atcgactctc gagcggttctc	20
<210> 34	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<221> modified_base	
<222> (18)...(18)	
<223> m5c	
<400> 34	
atcgactctc gagcggttctc	20
<210> 35	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 35	
tccatgtcgg tcctgatgct	20
<210> 36	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 36	
tccatgccgg tcctgatgct	20
<210> 37	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 37	
tccatggcgg tcctgatgct	20
<210> 38	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 38	
tccatgacgg tcctgatgct	20
<210> 39	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 39	
tccatgtcga tcctgatgct	20
<210> 40	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 40	
tccatgtcgc tcctgatgct	20
<210> 41	

10023909.1.1301

<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 41	
tccatgtcgt ccctgatgct	20
<210> 42	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 42	
tccatgacgt gcctgatgct	20
<210> 43	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 43	
tccataacgt tcctgatgct	20
<210> 44	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 44	
tccatgacgt ccctgatgct	20
<210> 45	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 45	
tccatcacgt gcctgatgct	20
<210> 46	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<400> 46	
ggggtcaacg ttgacgggg	19
<210> 47	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<400> 47	
ggggtcagtc gtgacgggg	19
<210> 48	
<211> 15	
<212> DNA	
<213> Artificial Sequence	
<400> 48	
gctagacgtt agtgt	15
<210> 49	
<211> 20	

10023909-1301

<212> DNA
<213> Artificial Sequence

<400> 49
tccatgtcgt tcctgatgct 20

<210> 50
<211> 24
<212> DNA
<213> Artificial Sequence

<400> 50
accatggacg atctgtttcc cctc 24

<210> 51
<211> 18
<212> DNA
<213> Artificial Sequence

<400> 51
tctcccagcg tgcgccat 18

<210> 52
<211> 24
<212> DNA
<213> Artificial Sequence

<400> 52
accatggacg aactgtttcc cctc 24

<210> 53
<211> 24
<212> DNA
<213> Artificial Sequence

<400> 53
accatggacg agctgtttcc cctc 24

<210> 54
<211> 24
<212> DNA
<213> Artificial Sequence

<400> 54
accatggacg acctgtttcc cctc 24

<210> 55
<211> 24
<212> DNA
<213> Artificial Sequence

<400> 55
accatggacg tactgtttcc cctc 24

<210> 56
<211> 24
<212> DNA
<213> Artificial Sequence

<400> 56
accatggacg gtctgtttcc cctc 24

<210> 57
<211> 24
<212> DNA

FOBT2T-606E200T

<213> Artificial Sequence

<400> 57
accatggacg ttctgtttcc cctc 24

<210> 58
<211> 15
<212> DNA
<213> Artificial Sequence

<400> 58
cacgttgagg ggcac 15

<210> 59
<211> 12
<212> DNA
<213> Artificial Sequence

<400> 59
tcagcgtgcg cc 12

<210> 60
<211> 17
<212> DNA
<213> Artificial Sequence

<400> 60
atgacgttcc tgacgtt 17

<210> 61
<211> 17
<212> DNA
<213> Artificial Sequence

<400> 61
tctcccagcg ggcgcac 17

<210> 62
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 62
tccatgtcgt tcctgtcgtt 20

<210> 63
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 63
tccatagcgt tcctagcgtt 20

<210> 64
<211> 21
<212> DNA
<213> Artificial Sequence

<400> 64
tcgtcgtgt ctccccttct t 21

<210> 65
<211> 19
<212> DNA
<213> Artificial Sequence

10033909-1301

<400> 65
tcctgacgtt cctgacgtt 19

<210> 66
<211> 19
<212> DNA
<213> Artificial Sequence

<400> 66
tcctgtcgtt cctgtcgtt 19

<210> 67
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 67
tccatgtcgt ttttgtcgtt 20

<210> 68
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 68
tcctgtcgtt ccttgtcgtt 20

<210> 69
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 69
tccttgtcgt tcctgtcgtt 20

<210> 70
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 70
tcctgtcgtt ttttgtcgtt 20

<210> 71
<211> 21
<212> DNA
<213> Artificial Sequence

<400> 71
tcgtcgctgt ctgcccttct t 21

<210> 72
<211> 21
<212> DNA
<213> Artificial Sequence

<400> 72
tcgtcgctgt tgcgtttct t 21

<210> 73
<211> 20
<212> DNA
<213> Artificial Sequence

<400> 73

10023909-121301

25

<210> 82	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<400> 82	
tgctcgttgct gttgctggt	19
<210> 83	
<211> 14	
<212> DNA	
<213> Artificial Sequence	
<400> 83	
tcgtcgtcgt cggt	14
<210> 84	
<211> 13	
<212> DNA	
<213> Artificial Sequence	
<400> 84	
tgctcgttgct gtt	13
<210> 85	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 85	
tccatagcgt tcctagcgtt	20
<210> 86	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 86	
tccatgacgt tcctgacgtt	20
<210> 87	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<400> 87	
gtcgyt	6
<210> 88	
<211> 7	
<212> DNA	
<213> Artificial Sequence	
<400> 88	
tgctcgyt	7
<210> 89	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<400> 89	
agctatgacg ttccaagg	18
<210> 90	

<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 90	
tccatgacgt tcttgacgtt	20
<210> 91	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 91	
atcgactctc gaacgttctc	20
<210> 92	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 92	
tccatgtcgg tcttgacgca	20
<210> 93	
<211> 8	
<212> DNA	
<213> Artificial Sequence	
<400> 93	
tcttcgat	8
<210> 94	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<400> 94	
ataggagggtc caacgttctc	20
<210> 95	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<400> 95	
gtcgtt	6
<210> 96	
<211> 6	
<212> DNA	
<213> Artificial Sequence	
<400> 96	
gtcgtc	6
<210> 97	
<211> 7	
<212> DNA	
<213> Artificial Sequence	
<400> 97	
tgtcgtt	7
<210> 98	
<211> 7	

10023909 1801
T08T2T "606E200T

<212> DNA
<213> Artificial Sequence

<400> 98
tgtcgct

7

10023909 121801